## ABSTRACT

The invention provides a failure diagnosing apparatus having a first sensor for detecting a temperature of cooling water of an engine mounted on a vehicle and a second sensor for detecting a temperature associated with the engine. The apparatus calculates a first difference between a temperature detected by the first sensor at the time when the engine stops in a previous operating cycle and a temperature detected by the first sensor at the time when the engine starts in a current operating cycle is calculated. The apparatus also calculates a second difference between a temperature detected by the second sensor at the time when the engine stops in the previous operating cycle and a temperature detected by the second sensor at the time when the engine starts in the current operating cycle. It is determined whether the first sensor is faulty based on the first difference and the second difference.

(Figure 5)

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